



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,954	02/01/2000	Roger A. McCurdy	TRW(TE)4170	4158

26294 7590 06/09/2003

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.  
526 SUPERIOR AVENUE, SUITE 1111  
CLEVEVLAND, OH 44114

EXAMINER

LUM, LEE S

ART UNIT

PAPER NUMBER

3611

DATE MAILED: 06/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/494,954

Applicant(s)

MCCURDY, ROGER A.

Examiner

Ms. Lee S. Lum

Art Unit

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Response filed 4/21/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

---

## DETAILED ACTION

---

1. A Response was faxed on 4/21/03, and will be entered on that date. Attorney B. Tummino called about that time to confirm receipt of the same Response which was allegedly faxed on 3/18/03. Examiner confirmed that that communication was not received by the Office.

This Office Action is provided in response to that communication. Upon review of the file, Examiner maintains Ross as a proper rejection (as indicated in the last Office Action mailed 12/20/02), while Thompson was (indeed) incorrectly applied. However, because a new art rejection is included here, and to clarify any confusion that may exist with prior communications from the Examiner, the finality of the last Office Action is withdrawn, and this Office Action is nonfinal.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**Claims 1-4, 10, 14, 17 and 22** are rejected under 35 U.S.C. 102(e) as being anticipated by Ross 5884203.

Ross discloses system 10 for protecting a vehicle occupant comprising crash sensors/accelerometer 12, (omni-directional) acoustic sensor 14 sensing acoustic activity propagating through the vehicle (col 4, lines 1-6), occupant protection devices (unidentified), and,

---

controller 22 controlling actuation of the protection devices in response to the various sensors separately indicating the occurrence of a deployment crash event.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al 6020812 in view of Feldmaier 4842301.

Thompson discloses system 10 for protecting a vehicle occupant comprising crash sensors/accelerometers 48, front, and side, crush zone sensors 16a-d, the sensors contained in a sensor module, occupant protection devices 42, and, controller 180 controlling actuation of the protection devices in response to the various sensors separately indicating the occurrence of a deployment crash event.

The reference does not disclose an acoustic sensing sensor (inherently omni-directional) that detects acoustic waves propagating through the vehicle structure, while Feldmaier shows this element 15/16 in a similar occupant protection system depicted in fig 2. While the multi-sensor system depicted in Thompson is functionally equivalent, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include an acoustic sensor, as shown in Feldmaier, as another embodiment to increase the accuracy and efficiency of the occupant protection system, this objective extremely well-known in the art.

Thompson, in view of Feldmaier, also discloses a method for controlling an occupant protection device, the steps derived from the structure and means discussed above.

---

**4. RESPONSE TO REMARKS**

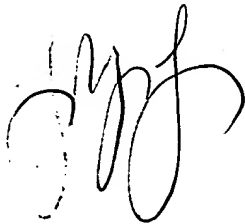
Examiner reiterates her rejections using Ross under 35 USC 102(e) because it clearly discloses the recited elements. Applicant's remarks on 3-6 re Ross' "failure" to meet the present recitations are unclear because the reference clearly states, in col 4, line 49, to col 5, line 16, that separate signals, from both acoustic sensors 16, and accelerometer 12, are processed by the controller to determine proper activation of the airbags. Column 5, lines 6-16, provides that both types of sensors are utilized to determine if activation is necessary.


Alternately, Claims 1-4, 10, 14, 17 and 22, as well as all remaining Claims, are rejected under 35 USC 103(a) with Thompson in view of Feldmaier, as provided above. Included in this new rejection are Claims previously indicated as having allowable subject matter. Examiner apologizes for the inconvenience.

**5. Communication with the Examiner and USPTO**

Any inquiry concerning this communication should be directed to Ms. Lum at (703) 305-0232, 9-530, M-F. Our fax number is (703) 872-9326, 872-9327 for after-final communications, and 308-2571 for faxes having given prior notice to the examiner. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Assistance at (703) 306-5771.

Ms. Lee S. Lum  
Examiner  
5/22/03



  
LESLEY D. MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600